

**REMARKS**

First and foremost, Applicant respectfully submits that entry of the present amendment is in order since it requires no additional searching and/or consideration by the Examiner since the amendments to the claims are merely to remove reference legends from the claims. Thus, these amendments do not substantively change the claims and entry is in order.

Claims 1-10, 12 and 15 stand objected to based on a number of informalities listed in the Office Action. Applicant has amended claims 1 and 7 to provide proper antecedent basis for a virtual image and therefore, this objection is moot. Claims 3 and 15 have been canceled and therefore, the objection of these claims is likewise moot.

Claims 1-10 and 12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Shafer in view of Takahashi. Applicant respectfully traverses this rejection for the following reasons.

Applicant respectfully submits that contrary to the Examiner's assertion, neither Shafer nor Takahashi discloses a **virtual** image formed physically behind a sixth mirror as recited in both independent claims 1 and 7. Since neither reference discloses or suggests the formation of a virtual image physically behind a sixth mirror, a combination of these reference fails to yield the claimed arrangement. Since this claimed feature is neither disclosed nor suggested by the cited references, either taken alone or in combination, reconsideration and allowance of independent claims 1 and 7 are in order.

Furthermore, Applicant respectfully submits that one of ordinary skill in the art having knowledge of Shafer would not take into account Takahashi to modify the catadioptric (mirrors and lenses) group G1 of Shafer for at least the following reasons. Takahashi does not disclose a catadioptric system but rather discloses a catoptric (only mirrors) system. A catoptric system is not able to correct chromatic aberration. However, the catadioptric group G1 according to Shafer is utilized to correct chromatic aberration caused by the dioptric (no mirrors) group G2. Second, the catoptric system of Takahashi forms a convergent beam, whereas the catadioptric group G1 of



between the fourth and fifth mirror as disclosed by Braat and a last mirror with a convex surface as disclosed by Shafer.

With respect to claim 13, there is, for example, no motivation for a set of features comprising a correction of the chromatic aberration as disclosed by Shafer and a third and a fourth mirror located physically between a first and a fourth mirror as disclosed by Braat.

Based on the foregoing, Applicant respectfully requests reconsideration and allowance of the claims since a combination of the cited references fails to yield the claimed invention.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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